

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-2. (canceled)

Claim 3. (currently amended): A composition for stimulating an immune response to HER-2 protein, wherein said composition is a chimeric peptide and comprises a HER-2 B cell epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; ~~The composition of claim 1,~~ wherein the sequence of the ~~HER-2 B~~ HER-2 B cell epitope is SEQ ID NO: 6,

wherein the Th epitope comprises a sequence selected from the group consisting of:

N-S-V-D-D-A-L-I-N-S-T-I-Y-S-Y-F-P-S-V, SEQ. ID. NO: 13;

P-G-I-N-G-K-A-I-H-L-V-N-N-Q-S-S-E, SEQ ID NO: 14;

Q-Y-I-K-A-N-S-K-F-I-G-I-T-E-L, SEQ ID NO: 15;

F-N-N-F-T-V-S-F-W-L-R-V-P-K-V-S-A-S-H-L-E, SEQ ID NO: 16;

L-S-E-I-K-G-V-I-V-H-R-L-E-G-V, SEQ ID NO: 17;

F-F-L-L-T-R-I-L-T-I-P-Q-S-L-N, SEQ ID NO: 18; and

T-C-G-V-G-V-R-V-R-S-R-V-N-A-A-N-K-K-P-E, SEQ ID NO: 19; and

wherein the linker consists of from one to fifteen amino acids.

Claims 4-34. (canceled)

Claim 35. (previously presented): A composition for stimulating an immune response to HER-2 protein, wherein said composition is a chimeric peptide and comprises a HER-2 B cell epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; wherein SEQ ID NO: 6 is the sequence of the HER 2-B cell epitope, wherein SEQ ID NO: 17 is the sequence of the Th epitope, and wherein SEQ ID NO: 20 is the sequence of the linker.

Claims 36-38. (canceled)

Claim 39. (new): A mixture comprising the composition of Claim 3, further comprising a second chimeric peptide wherein said second chimeric peptide comprises a HER-2 B cell epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; wherein the sequence of the HER-2 B cell epitope is SEQ ID NO: 42,

wherein the Th epitope comprises a sequence selected from the group consisting of:

N-S-V-D-D-A-L-I-N-S-T-I-Y-S-Y-F-P-S-V, SEQ. ID. NO: 13;

P-G-I-N-G-K-A-I-H-L-V-N-N-Q-S-S-E, SEQ ID NO: 14;

Q-Y-I-K-A-N-S-K-F-I-G-I-T-E-L, SEQ ID NO: 15;

F-N-N-F-T-V-S-F-W-L-R-V-P-K-V-S-A-S-H-L-E, SEQ ID NO: 16;

L-S-E-I-K-G-V-I-V-H-R-L-E-G-V, SEQ ID NO: 17;

F-F-L-L-T-R-I-L-T-I-P-Q-S-L-N, SEQ ID NO: 18; and

T-C-G-V-G-V-R-V-R-S-R-V-N-A-A-N-K-K-P-E, SEQ ID NO: 19; and

wherein the linker consists of from one to fifteen amino acids.

Claim 40. (new): A mixture comprising the composition of Claim 3, further comprising a second chimeric peptide wherein said second chimeric peptide comprises a HER-2 B cell

epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; wherein SEQ ID NO: 42 is the sequence of the HER 2-B cell epitope, wherein SEQ ID NO: 17 is the sequence of the Th epitope, and wherein SEQ ID NO: 20 is the sequence of the linker.

Claim 41. (new): A mixture comprising the composition of Claim 35, further comprising a second chimeric peptide wherein said second chimeric peptide comprises a HER-2 B cell epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; wherein the sequence of the HER-2 B cell epitope is SEQ ID NO: 42,

wherein the Th epitope comprises a sequence selected from the group consisting of:

N-S-V-D-D-A-L-I-N-S-T-I-Y-S-Y-F-P-S-V, SEQ. ID. NO: 13;

P-G-I-N-G-K-A-I-H-L-V-N-N-Q-S-S-E, SEQ ID NO: 14;

Q-Y-I-K-A-N-S-K-F-I-G-I-T-E-L, SEQ ID NO: 15;

F-N-N-F-T-V-S-F-W-L-R-V-P-K-V-S-A-S-H-L-E, SEQ ID NO: 16;

L-S-E-I-K-G-V-I-V-H-R-L-E-G-V, SEQ ID NO: 17;

F-F-L-L-T-R-I-L-T-I-P-Q-S-L-N, SEQ ID NO: 18; and

T-C-G-V-G-V-R-V-R-S-R-V-N-A-A-N-K-K-P-E, SEQ ID NO: 19; and

wherein the linker consists of from one to 15 amino acids.

Claim 42. (new): A mixture comprising the composition of Claim 35, further comprising a second chimeric peptide wherein said second chimeric peptide comprises a HER-2 B cell epitope, a T helper (Th) epitope, and a linker joining said HER-2 B cell epitope to said Th epitope; wherein SEQ ID NO: 42 is the sequence of the HER 2-B cell epitope, wherein SEQ ID NO: 17 is the sequence of the Th epitope, and wherein SEQ ID NO: 20 is the sequence of the linker.